Telepsychiatry in North Carolina:
Mental Health Care Comes to You
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By Andrew Holton and Todd Brantley, with Aisander Duda

Executive Summary

Telepsychiatry is part of a growing national trend called telemedicine, in which physicians can see patients from remote locations using secure video and audio-streaming technology called videoconferencing. Using this system, a psychiatrist or other professional can talk to and physically view the patient through a video screen with a web camera and microphone. On the other end, the patient can view the psychiatrist through a similar audio-visual system.

This technology is a new way for mental health and substance abuse services to be delivered in rural areas of the state, easing the pressure of the state’s mental health workforce shortage. Dr. Sy Saeed, the chair of the Department of Psychiatric Medicine at East Carolina University (ECU), says, “There is no health without mental health. If you don’t have professionals in the area, you have a problem.”

Bringing Telepsychiatry to Northeastern North Carolina

In operation since 1992, ECU has one of the longest continuously running telemedicine centers in the world. ECU’s Telemedicine Center provides telepsychiatry services at a variety of sites, ranging from state psychiatric hospitals to family doctors to pediatricians to residential schools for the deaf and blind.
In 2010, the Albemarle Hospital Foundation in Elizabeth City partnered with psychiatrists at Coastal Carolina Neuropsychiatric Center in Jacksonville to develop a hospital-based telepsychiatry program for northeastern North Carolina. This program was a success, expanding to serve 14 hospitals in 29 counties covering more than 1 million people. Four more hospitals were served as of October 2013.

The program has improved patient outcomes:

- Length of stay (LOS) in the emergency rooms for patients waiting to be discharged to inpatient treatment has declined from 48 hours to 22.5 hours.
- Thirty-day recidivism rates at Albemarle Hospital have declined from 20 percent to 8 percent.
- The number of involuntary commitments to local hospitals or state psychiatric hospitals has been reduced by 33 percent.
- Readmissions of those with severe and persistent mental illness to psychiatric hospitals have declined.
- Eighty-eight percent of patients agree or strongly agree that they were satisfied with the telepsychiatry services they received.

Gwen Newman, a patient that uses telepsychiatry in Hyde County, says, “Driving an hour and a half to go to the doctor or to get one of my family members there is exhausting and frustrating. This telemedicine program makes a huge difference for all of us. I know we’re healthier because of it.” That’s the promise of telepsychiatry … mental health care comes to you, even if you live in rural North Carolina.

**Barriers To Acceptance and Implementation of Telepsychiatry**

Nationally, the implementation of telepsychiatry has been slower than anticipated, despite the success of the technology. The barriers to patients may include that they don’t know about it, they worry about privacy, and older patients may be uncomfortable with the technology.

The barriers for health care providers include whether the standard of care should be different for telemedicine. Health care providers worry about malpractice lawsuits and liability for violating privacy laws. Interstate licensure is also a concern—for instance, whether a North Carolina medical license should be required for a psychiatrist licensed and located in another state and providing care via telepsychiatry to patients here. Finally, psychiatrists have concerns about getting reimbursed for the care they provide.
North Carolina’s New Statewide Telepsychiatry Initiative

Addressing these barriers to patients and mental health providers will help the state implement a statewide telepsychiatry system worthy of national recognition. In July 2013, the N.C. General Assembly established a statewide telepsychiatry program in North Carolina. The North Carolina Statewide Telepsychiatry Program (NC-STeP) will be administered by East Carolina University’s Center for Telepsychiatry and e-Behavioral Health (CTeB), and it will be substantially similar to the Albemarle Hospital Foundation Telepsychiatry Project. Intended to be up and running statewide by January 1, 2014, all hospitals that are licensed to operate in North Carolina will be allowed to participate. The legislature appropriated $2 million for 2013–14 and $2 million for 2014–15 for the program.

In August 2013, the N.C. Department of Health and Human Services presented a plan to the legislature to implement the statewide telepsychiatry program. Initially, the primary objective of the program is to improve access to telepsychiatry in hospital emergency rooms across the state.

There are 108 hospitals with 122 emergency departments in North Carolina. Of these 108 hospitals, 18 are served by the existing Albemarle Hospital Foundation Telepsychiatry Department, 13 are served by Carolinas Health System’s Telepsychiatry Program in Charlotte, seven are served by the Novant Telepsychiatry Project in Winston-Salem, three are served by the FirstHealth Telepsychiatry Project in Pinehurst, and eight have on-site psychiatric coverage. Thus, almost 60 hospitals will be served by North Carolina’s new statewide telepsychiatry program.

On November 1, 2013, the 18 hospitals served by the Albemarle Hospital Foundation transitioned to the statewide telepsychiatry network, and 53 hospitals were on the waiting list for the statewide telepsychiatry network.

The Center’s Findings and Recommendations

Based on our research, the N.C. Center for Public Policy Research finds that for many people living in rural North Carolina access to mental health care is the biggest barrier to recovery. Telepsychiatry will increase access to treatment across the state, and it may reduce the amount of time patients have to wait in emergency rooms for treatment, reduce the likelihood that patients will have to return to the emergency room for treatment, reduce the number of involuntary commitments to hospitals for psychiatric care, and reduce readmissions to psychiatric hospitals for those with severe and persistent mental illness. Patient
satisfaction with telepsychiatry appears to be high, and the Center did not find any evidence that face-to-face encounters with psychiatrists are more effective.

Based on our findings, the N.C. Center for Public Policy Research recommends that the Governor, the N.C. General Assembly, the Office of Rural Health and Community Care in the N.C. Department of Health and Human Services (DHHS), and the N.C. Telepsychiatry Program Advisory Group consider the following actions to implement the state’s new telepsychiatry program and make it a national model:

1. **The DHHS Office of Rural Health and Community Care and ECU’s Center for Telepsychiatry should conduct a public campaign to raise awareness about telepsychiatry in rural and underserved communities.** This should include patient stories specifically addressing patient concerns regarding their privacy, the confidentiality of their personal health information, and any discomfort older adults may feel about technology.

2. **The DHHS Office of Rural Health and Community Care should provide technical information directly to rural health care providers and health centers describing expected costs, funding sources, legal restrictions, and clear reimbursement rates for telepsychiatry services.**

3. **The N.C. General Assembly should conduct a study of telemedicine, and consider whether private insurers should be required to fully reimburse health care providers for telepsychiatry services.** House Bill 704, which passed the House in 2013 and is pending in the Senate for the 2014 legislative session, would require the Joint Legislative Oversight Committee on Health and Human Services to conduct a study of telemedicine. According to the state’s plan, this bill would be “a first step for possible enactment of legislation to require full payment by third party payors for services provided via telemedicine.” The Legislative Research Commission Study Committee on Health Care Provider Practice Sustainability and Training/Additional Transparency in Health Care is conducting a “comprehensive review of all existing State programs that are designed to improve access to health care provider care using telemedicine, including the name of the program, a description of the program, and details on program performance.” The commission may make an interim report of recommendations to the 2014 legislature and is required to make a final report to the 2015 legislature.
4. The DHHS Office of Rural Health and Community Care should provide technical and financial assistance to rural health care providers who want to incorporate telepsychiatry into their practices. The Office should assess the need for a one-time subsidy to hospitals, community health departments, and rural providers to update their telecommunication capabilities. If needed, the legislature should appropriate funds to implement the subsidy.

5. The N.C. General Assembly should increase funding to the state’s medical schools, nursing programs, schools of social work and psychology programs, as needed, to incorporate telemedicine and telepsychiatry as part of the curriculum. The UNC Board of Governors should decide where to focus the funding, which programs will take a leadership role, and the number of campuses involved.

6. The DHHS Office of Rural Health and Community Care should partner with medical schools in North Carolina to incorporate telepsychiatry into the residency programs at East Carolina University, Duke University, UNC-Chapel Hill, and Wake Forest University and partner with local Area Health Education Center (AHECs) to connect psychiatric residents under appropriate faculty supervision with rural providers via centralized telepsychiatry services.

7. As part of its implementation of North Carolina’s statewide telepsychiatry program, the N.C. Department of Health and Human Services should adopt in its rules the practice guidelines for video-based online mental health services promulgated by the American Telemedicine Association in May 2013. The ATA established these practice guidelines and technical standards for telemedicine, which are based on clinical and empirical evidence, “to help advance the science and to assure the uniform quality of service to patients.” These guidelines serve as both a reference guide for operations and an educational tool to provide appropriate care for patients. Implementing these guidelines for telepsychiatry will improve clinical outcomes and ensure informed and reasonable patient expectations.

8. The N.C. Department of Health and Human Services should develop criteria and outcome measures to evaluate the successes and failures of the state’s telepsychiatry program. Currently, ECU’s Center for Telepsychiatry is required to develop and administer an oversight
process, including quality management as well as monitoring and reporting of outcomes for the state’s telepsychiatry program. The Center for Telepsychiatry is already required to report quarterly and annually to the DHHS Office of Rural Health and Community Care on (a) the number of consultant sites and referring sites participating in the program, (b) the number of psychiatric assessments conducted under the program, reported by site or region, (c) the length of stay (LOS) of patients receiving telepsychiatry services in the emergency rooms of hospitals participating in the program, reported by disposition, and (d) the number of involuntary commitments (IVCs) as a result of telepsychiatry assessments, reported by site/region and year, compared to the number of IVCs prior to implementation of this program. Additionally, all clinical providers are required to participate in a peer review process.

ECU’s Center for Telepsychiatry also should be required to track and report these additional outcomes: (a) satisfaction of emergency room staff, the psychiatrist, and the patient, and (b) recidivism data on the number of patients who return to the emergency room within 30 days.

The DHHS Office of Rural Health and Community Care should implement its goals for the telepsychiatry program, including among others increasing the number of patients served with telepsychiatry, reducing the average length of stay (LOS) of telepsychiatric patients in the emergency departments of local hospitals and state psychiatric hospitals, increasing the number of psychiatrists and psychiatric residents trained to use telepsychiatry, and reducing the cost of mental health care. The Office should adopt additional outcome measures that evaluate: (a) whether the patients’ mental health status actually improves; (b) whether involuntary commitments from telepsychiatric patients are reduced; and (c) whether more patients are served after the state’s telepsychiatry initiative is implemented than was true before; and (d) especially whether more are served in rural counties or in medically underserved areas.
Getting mental health care to the rural areas of North Carolina has never been easy. Twenty-eight counties across the state still do not have a psychiatrist. This work force shortage is real, and it has a real impact on the lives of those needing mental health treatment in places that are far away.

In northeastern North Carolina, mental health care providers tell stories about “the 18-hour work day.” A psychiatrist would wake up early, early in the morning to take a three-hour ferry to the Outer Banks. If the psychiatrist took the ferry back, then he would only be able to provide treatment services for one hour. So he took the long way back, resulting in an 18-hour work day to provide these important services to people in need in our rural counties.

No one questions the existence of the problem, but solutions have been hard to find. Until now. Telepsychiatry is changing the way mental health care is provided to people in need in very rural areas all across our state.

Telepsychiatry is part of a growing national trend called telemedicine, in which physicians can see patients from remote locations using secure video and audio-streaming technology called videoconferencing. Using this system, a psychiatrist or other health care professional can talk to and physically view the patient through a video screen with a web camera and microphone. On the other end, the patient can view the psychiatrist through a similar audio-visual system. North Carolina is a national leader in the use of telepsychiatry, thanks to the leadership, hard work, and determination of a group of professionals committed to this solution.

Dr. Sy Saeed, the chairman of the Department of Psychiatric Medicine at the Brody School of Medicine at East Carolina University, pioneered the use of this technology. The ECU Telemedicine Center has been addressing that problem since 1992, making
it one of the longest continuously running telemedicine centers in the world. ECU’s Telemedicine Center provides telepsychiatry services at a variety of sites, ranging from state psychiatric hospitals to family doctors to pediatricians to residential schools for the deaf and blind. Saeed says, “There is no health without mental health. If you don’t have professionals in the area, you have a problem.”

Expanding the Use of Telepsychiatry in Northeastern North Carolina

For Phil Donahue, the former vice president of the Albemarle Hospital Foundation in Elizabeth City, the mental health workforce shortage became all too real in February 2009. The Albemarle local mental health management entity (LME)—an organization funded by the state to oversee the referral and payment for mental health services for a 10-county region in northeastern North Carolina—became financially insolvent, leaving area hospitals and free clinics without much-needed psychiatric services. Those 10 counties served in the northeastern part of the state were Camden, Chowan, Currituck, Dare, Hyde, Martin, Pasquotank, Perquimans, Tyrrell, and Washington counties.1

“Because of some improprieties of the director, the LME went under, it just collapsed,” says Donahue. “What happened then was that the psychiatrists they employed all left because they weren’t getting paid, and they took other jobs. So we were left with no psychiatric services for the entire 10-county region.”

Located in Elizabeth City in Pasquotank County, the Albemarle Hospital Foundation was created in 2003 as a part of the Albemarle Health system, and it currently oversees 12 programs in northeastern North Carolina. The Foundation’s Community Care Clinic in Elizabeth City offers free primary care and prescription services to the region’s indigent and uninsured population. Other clinics in Gatesville and Tyner offer

“We live in a time when the treatment of mental illness has never been more effective. Recovery is possible and within reach! Unfortunately, many of our patients don’t have access to treatment. It’s not uncommon for me when I’m in the clinic to hear from the patient that the reason they can’t come to the clinic is because they can’t afford the gas. Telepsychiatry offers the promise of bridging the distances between providers and patients.”

— DR. SY SAEED, CHAIRMAN OF THE DEPARTMENT OF PSYCHIATRIC MEDICINE, BRODY SCHOOL OF MEDICINE, EAST CAROLINA UNIVERSITY

Telepsychiatry with the Eastern North Carolina School for the Deaf
“The need for more and more care will increase. So we just have to be smart and use technology to tie the number of providers to the growing need and number of patients.”

— DR. ROBIN CUMMINGS, DEPUTY SECRETARY FOR HEALTH SERVICES, N.C. DEPARTMENT OF HEALTH AND HUMAN SERVICES

services on a sliding scale based on family income. The Albemarle Health System also operates the Albemarle Hospital in Elizabeth City and a regional medical center in Kitty Hawk.

“We had an agreement with the LME that we would see all of their uninsured patients through our pharmacy programs,” says Donahue. “So, we had all of these patients who all of a sudden needed refills on their prescriptions and no doctor to authorize it.”

The result was an increasing number of uninsured patients arriving at the doors of the region’s hospital emergency rooms. Psychiatric lengths of stay for patients presenting to local emergency rooms with mental health issues began to burden the capacities of local hospitals. According to Donahue, many patients entering emergency rooms for psychiatric services only need a psychiatric evaluation or a change in their medications. However, many emergency medical providers are not trained properly to provide those psychiatric services, so they admit the patient and hold them until they can obtain a psychiatric consultation or have them admitted to one of the state’s psychiatric hospitals.

“When we’re holding a patient, we have about one or two staff people who have to drop what they’re doing to (1) physically watch this patient and make sure they don’t hurt themselves or someone else, and (2) start that whole committal process — of writing all the papers and making all the phone calls, doing all the things you have to do to get this person committed into an institution,” says Donahue. “Sometimes we can get it done in a day or two, sometimes it takes three or four days to do it. And we have had patients being held up to six days in our hospital. That wait comes at a huge cost for the hospital, the family, and most importantly, the patient.”

The number of admissions to hospital emergency departments statewide continues to increase for those with a mental health, developmental disability, or substance abuse diagnosis from 132,214 in 2009 to 156,661 in 2012, an 18.5 percent increase. The N.C. Hospital Association collected data in 2012 for about 40 percent of the hospitals across the state on persons with mental health and substance abuse diagnoses, including wait times by disposition. For those admitted to a community hospital psychiatric bed, the wait time was 24.5 hours. For those admitted to a state psychiatric hospital the wait time was more than 78 hours. In the first half of 2013, the average wait time for state hospital admissions had increased to more than 85 hours.

“I have met with every county manager in these 10 counties, and it’s the biggest single problem they face,” says Donahue. “They either have to send their sheriffs to stay with the patient in the hospital or to drive the patient to the state institution where they can get a commitment. Nine times out of 10, these patients don’t need to be committed. They are evaluated there, and they are sent home. We have had cases where the patient gets back to town before the sheriff does.”

The Albemarle Hospital Foundation’s foray into telepsychiatry has been a success. The hospital-based telepsychiatry program expanded to
serve 14 hospitals in 29 counties covering more than 1 million people. Four more hospitals were served as of October 2013.4 Donahue is quick to note that the success of the program would not have been possible without funders like The Duke Endowment and Kate B. Reynolds Charitable Trust, health care providers like ECU’s Telemedicine Center and Coastal Carolina Neuropsychiatric Center, skilled professionals like his former director of telepsychiatry Sheila Davies, who figured out how to make this idea work on the ground, and the patients who were willing to give it a try.

The program has improved patient outcomes. Length of stay (LOS) in the emergency rooms for patients waiting to be discharged to inpatient treatment has declined from 48 hours to 22.5 hours. Thirty-day recidivism rates at Albemarle Hospital have declined from 20 percent to 8 percent. The number of involuntary commitments to local hospitals or state psychiatric hospitals has been reduced by 33 percent. Readmissions of those with severe and persistent mental illness to psychiatric hospitals also have declined.5 Eighty-eight percent of patients agree or strongly agree that they were satisfied with the telepsychiatry services they received. See Table 1 for additional information on outcomes at different telepsychiatry programs in North Carolina.

South Carolina’s Experience with Telepsychiatry

In looking for solutions to the lack of psychiatric services in the Albemarle region, Phil Donahue visited South Carolina to study their telepsychiatry system, which has been in operation since 2007 when it was first funded by The Duke Endowment in Charlotte. It had proven to be a valuable service for communities that do not have the psychiatric professionals necessary to meet their mental health consumers’ needs.

The use of telepsychiatry in South Carolina not only has increased access to care for rural communities, but it also has contained costs by decreasing the number of people admitted to state institutions from hospital emergency rooms. In three years, from 2010–13, the number of patients treated using telepsychiatry increased from

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**Definition of Telepsychiatry**

The definition of telepsychiatry is the delivery of acute mental health or substance abuse care, including diagnosis or treatment, by means of a secure, two-way real-time interactive audio and video by a health care provider in a remote location to an individual needing care at a referring site. “The term does not include the standard use of telephones, facsimile transmissions, unsecured electronic mail, or a combination of these in the course of care,” according to N.C. General Statute § 143B-139.4B.

“We have the nurse prepare the patient, tell them what to expect, tell them they are going to talk to a psychiatrist in a different location. They have the option to have a member of their family with them, if they choose to, but most of them do not. And then we close the door and let them interact with the psychiatrist. Of course, we are there if they need us for any reason.”

— PHIL DONAHUE, FORMER VICE PRESIDENT OF THE ALBEMARLE HOSPITAL FOUNDATION AND NOW WITH EAST CAROLINA UNIVERSITY

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Phil Donahue, former vice president of the Albemarle Hospital Foundation and now with East Carolina University
## Table 1. Outcomes in 2012: The Duke Endowment Telepsychiatry Project, including Albemarle Hospital, FirstHealth of the Carolinas, and Novant Health

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
<th>Definition</th>
<th>Albemarle Hospital</th>
<th>First Health</th>
<th>Novant</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of ED Psychiatric Patients</td>
<td>The number of psychiatric patients admitted to the ED</td>
<td></td>
<td>2,839</td>
<td>789</td>
<td>2,376</td>
<td>6,004</td>
</tr>
<tr>
<td>Number of ED Telepsychiatry Patients</td>
<td>The number of psychiatric patients who receive at least one telepsychiatry assessment</td>
<td></td>
<td>1,203</td>
<td>3</td>
<td>198</td>
<td>1,404</td>
</tr>
<tr>
<td>Number of Psychiatric Assessments</td>
<td>The number of psychiatric assessments conducted</td>
<td></td>
<td>1,465</td>
<td>20</td>
<td>198</td>
<td>1,683</td>
</tr>
<tr>
<td>Length of Stay</td>
<td>Number of hours ED telepsychiatry patients spend in the emergency department</td>
<td>Length of Stay = length of time from when the patient is admitted to the ED to the time the patient is discharged</td>
<td>11</td>
<td>7</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>Involuntary Commitment</td>
<td>Total number of IVCs in the ED</td>
<td>Total number of ED patients who have an IVC — this includes those who come in with an IVC and those who become IVC’d after being assessed</td>
<td>479</td>
<td>3</td>
<td>74</td>
<td>556</td>
</tr>
<tr>
<td>Involuntary Commitment Overturned</td>
<td>Number of IVCs overturned</td>
<td>Total number of IVCs that are overturned in the ED saving law enforcement man hours, travel time, and fuel</td>
<td>149</td>
<td>2</td>
<td>49</td>
<td>200</td>
</tr>
<tr>
<td>Emergency Department Recidivism</td>
<td>Patients who return to the ED within 30 days</td>
<td>Total number of patients that return to the ED within 30 days of a psychiatric visit.</td>
<td>18</td>
<td>0</td>
<td>59</td>
<td>77</td>
</tr>
<tr>
<td>Disposition</td>
<td>The arrangement or outcome ending the patient’s ED visit</td>
<td>For each patient, the hospital will select one of the following dispositions:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transferred for Inpatient Psychiatric or Substance Abuse Treatment</td>
<td></td>
<td>528</td>
<td>1</td>
<td>61</td>
<td>590</td>
</tr>
<tr>
<td></td>
<td>Admitted to Hospital</td>
<td></td>
<td>29</td>
<td>0</td>
<td>7</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Home/Outpatient Follow-Up</td>
<td></td>
<td>381</td>
<td>22</td>
<td>129</td>
<td>532</td>
</tr>
<tr>
<td></td>
<td>Patient Left Hospital Against Medical Advice</td>
<td></td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>13</td>
</tr>
</tbody>
</table>

*Notes: ED = Emergency Department  IVC = Involuntary Commitment  
Source: Sheila Davies, Program Implementation, East Carolina University*
8.7 to 12.3 per day. The length of stay in emergency departments waiting for treatment has decreased from 48–72 hours to less than six hours in July 2013.6

After visiting South Carolina, the Albemarle Hospital Foundation initially provided the necessary technology to allow patients at two free clinics to have access to Dr. Sy Saeed and a group of psychiatric professionals at East Carolina University in Greenville, more than 100 miles from Elizabeth City. Unable to afford high-end telepsychiatry technology, which Phil Donahue estimated to cost $35,000–40,000 per unit, he used some older equipment from the local mental health management entity and the local hospital. “We made it work,” Donahue says. “Patients seemed to be ok with it, even though the screens were rather small, and it was not ideal for telepsychiatry.” Once a week, patients at the free clinics could see a psychiatric professional for medication management, evaluations, and basic mental health check-ups. “Our hope in doing this,” says Donahue, “is that we avoid having these same people in our emergency departments later on.” The telepsychiatry program at the clinics is not operational anymore, but it was the building block for the Foundation’s hospital-based telepsychiatry program, which in turn was the building block for North Carolina’s new statewide telepsychiatry program.

### South Carolina’s Eight Goals for Its Telepsychiatry Network

1. Increase the number of patients receiving comprehensive assessment utilizing telemedicine technology.
2. Ensure focused documentation is generated for each telemedicine consultation.
3. Maximize the number of patients seen through a seamless joint consultation process.
4. Secure better quantitative information on the diagnosis of mental health, substance abuse, and co-occurring disorders.
5. Reduce the average length of stay in the emergency department.
6. Increase the number of professional staff in local hospitals receiving training via the Department of Mental Health training presentations.
7. Increase the number of psychiatrists and psychiatric residents trained to use the telemedicine system and provide opportunity for a larger pool of psychiatrists for consultation.
8. Reduce the cost of mental health care by decreasing the utilization of sheriff deputies, probate judges, and designated examiners.


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**Using Telepsychiatry To Increase Access to Mental Health Services in Rural Areas**

Electronic information and telecommunication technologies provide new ways to deliver medical care and can ease the pressure of North Carolina’s mental health workforce shortage. In a handful of North Carolina settings, telepsychiatry allows rural health care providers to connect to mental health experts in other parts of the state. Interactive technologies like videoconferencing, the Internet, store-and-forward technology,7 and streaming media make it possible for mental health providers to be in two places at once.8 The American Psychiatric Association says
telepsychiatry is “one of the most effective ways to increase access to psychiatric care for individuals living in underserved areas.” And, as part of its mission to assure quality healthcare for underserved, vulnerable, and special needs populations, the U.S. Department of Health and Human Services promotes the use of telehealth technologies for health care delivery.

The Sheps Center for Health Services Research at UNC-Chapel Hill recently released data for 2011 on the number of physician specialists by county. Twenty-eight counties in North Carolina do not have a psychiatrist (compared to 30 the year before in 2010), and an additional 18 counties have only one psychiatrist. Seventy counties do not have a child psychiatrist, and an additional 14 only have one. Only six counties have a geriatric psychiatrist. Only five counties have addiction psychiatrists, and only 13 counties have physicians specializing in addiction and chemical dependency. See Table 2.

Using federal data, in August 2013, 58 counties in North Carolina were designated Health Professional Shortage Areas because they do not have a sufficient number of

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**How Telepsychiatry Works**

“A nurse rolls a portable cart outfitted with a monitor, camera, and microphone into the patient’s bay or room, establishes a secure link to the psychiatric provider site and introduces the patient to an intake specialist on the other end who’s already reviewed the patient’s information.

This psychologist or social worker explores the patient’s situation and gathers more information from family members. A psychiatrist then interviews the patient and makes a recommendation to the referring hospital physician, who is ultimately responsible for care decisions.”

mental health providers.\textsuperscript{11} Telepsychiatry is part of the solution for providing mental health and substance abuse care to North Carolinians in rural areas.

Telepsychiatry networks typically have a “regional medical center or state psychiatric hospital” as a hub, with community organizations and providers connected like spokes. Consultations and evaluations are sent from the hub to the various spokes through telecommunication mechanisms, such as videoconferencing. At the central hub site is the mental health specialist. At the spoke site with the patient, is a “community mental health staff member who provides case management, information, and support.” Many spoke sites have a nurse physically present in the room during the consultation to observe the patient and assist with ordering medications and other medical services.\textsuperscript{12}

Research on Telepsychiatry

Telepsychiatry improves collaboration between practitioners and can improve patient satisfaction.\textsuperscript{13} The American Psychiatric Association has reported nationally that patients are generally satisfied with the experience.\textsuperscript{14} Dr. Sy Saeed of ECU says he has found no evidence that “patient satisfaction or outcomes with telepsychiatry are inferior to those seen in comparable face-to-face treatment.”\textsuperscript{15}

A survey of children and their parents using telepsychiatry services in rural Kentucky found similar patient satisfaction. All the respondents in Kentucky felt that telepsychiatry allowed greater access to care and “almost all” did not prefer an in-person consultation to a telepsychiatry visit. Interestingly, some of the children participating in the service found it easier to be open with a provider in a telepsychiatry consultation than in a traditional in-person consultation.\textsuperscript{16}

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### Table 2. Annual Profile of Health Professionals in North Carolina, Physician Specialties, 2011

<table>
<thead>
<tr>
<th>Type of Physician Specialty</th>
<th>Counties with 0</th>
<th>Counties with 1</th>
<th>Counties with 2 or more</th>
<th>Total # of Professionals Statewide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addiction Psychiatry</td>
<td>95</td>
<td>3</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Addiction/Chemical Dependency</td>
<td>87</td>
<td>9</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>28</td>
<td>18</td>
<td>54</td>
<td>971</td>
</tr>
<tr>
<td>Child Psychiatry</td>
<td>70</td>
<td>14</td>
<td>16</td>
<td>146</td>
</tr>
<tr>
<td>Geriatric Psychiatry</td>
<td>94</td>
<td>4</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>

\textit{Note:} The 28 counties in North Carolina that do not have a psychiatrist are Alleghany, Anson, Ashe, Bertie, Bladen, Camden, Dare, Edgecombe, Franklin, Gates, Graham, Hoke, Hyde, Jackson, Jones, Macon, Madison, McDowell, Mitchell, Montgomery, Northampton, Pamlico, Scotland, Swain, Transylvania, Tyrrell, Warren, and Yancey.

\textit{Source:} The Cecil G. Sheps Center for Health Services Research at UNC-Chapel Hill. See the Excel spreadsheet for physician specialties. On the Internet at \text{http://www.shepscenter.unc.edu/hp/prof2011.htm.}
Telepsychiatry and Telemedicine: Access, Quality of Care, and Affordability Are Key Considerations

by Dr. Don W. Bradley, Chief Medical Officer and Senior Vice President of Healthcare for Blue Cross and Blue Shield of North Carolina

Blue Cross and Blue Shield of North Carolina (BCBSNC) supports the use of telemedicine when used appropriately and therefore supports a study of telemedicine. However, BCBSNC opposes regulations that would require reimbursement for telemedicine because most insurers include, or are working to include, coverage for telemedicine and a mandate could have unintended consequences, including increased out-of-pocket costs or premiums for our members.

Among the many issues we face in the health care industry, increasing access to high quality, affordable care remains a challenge in both the public and private sectors. Telemedicine, if employed appropriately, can be a useful tool. In making the case for this technology, several key components must be considered: access, quality of care/outcomes, patient experience, and affordability (including patient out-of-pocket costs and the pressure of health care costs on premiums). These measures will have different meanings to different stakeholders and will impact the public and private sectors differently. Consequently, telemedicine policies should be developed collaboratively and comprehensively among all stakeholders — both in the public and private sectors.

BCBSNC has reimbursed telemedicine claims since 1997. In North Carolina, our current claims experience shows that the majority of telemedicine services that we pay for are claims for mental health care. As a result of the Affordable Care Act, BCBSNC anticipates a growth in demand for mental health services and supports a comprehensive approach to developing telemedicine in mental health care, not just telepsychiatry.

BCBSNC opposes mandates requiring reimbursement that could lead to increased out-of-pocket costs or premiums for our members and thus opposes a reimbursement mandate for telemedicine — especially one that protects fee-for-service payments. Reimbursement decisions between private parties should be left to the private marketplace.

Reimbursement mandates are not necessary in the private market to achieve the broader goals of telemedicine. Collaborative efforts between private payers and providers are taking place across the state. These efforts not only address provider compensation, but also focus on access, quality outcomes, and affordable health care for consumers. A reimbursement mandate focusing on dated models of payment could hamper this innovation.

Profit margins for providers can be preserved, or even improved, without reimbursement mandates. For example, if patients leave the emergency room sooner or are discharged more quickly because of access to telepsychiatry, then facilities will save money by providing this type of care. Furthermore, telemedicine technology reduces overhead because of the reduced need for “bricks and mortar;” nurses, patient gowns, etc. — all of which would support a cost-savings that should be passed on to the patient.

Furthermore, it is unnecessary for “a structure for reimbursement of collateral changes, such as technicians and line time,” particularly if the equipment is subsidized by an outside source, like a foundation or the state. More specifically, mental health telemedicine programs do not require sophisticated cameras (as is required when using telemedicine to provide dermatology services, for example) or peripherals (auxiliary devices allowing a computer to perform additional functions). On a secure network, providers can use a standard, built-in webcam on their device or computer. The need for expensive equipment may not be justified for this type of program...
given the nature of videoconferencing capabilities in personal devices.

BCBSNC supports a study of telemedicine to assess the cost-effectiveness of its use and its impact on access, patient experience and acceptance, and care outcomes. Key factors to consider in the study should include:

- The impact of telemedicine in different settings on access, outcomes, and affordable health care for consumers;
- Existing barriers to telemedicine, including requirements of an in-person examination before prescribing;
- Training, credentialing, and privileging both at the originating site and the consulting site;
- Adequate clinical evaluation to justify the evaluation and management code providers will file and full clinical documentation for each encounter filed;
- Expectations around providing only medically necessary care;
- Consumer protections from fraudulent claims and systematic double-dipping;
- Ensuring patient privacy and confidentiality;
- Patient consent;
- The role of telemedicine in supporting alternative delivery methods;
- The role of telemedicine in supporting a move from fee-for-service reimbursement to fee-for-value reimbursement; and
- The potential for increased utilization, particularly in a fee-for-service reimbursement model.

Online care can increase access to high quality, convenient, and affordable care in North Carolina, but only if rules and processes are aligned with modern care models. There are numerous regulatory and legal barriers to a full spectrum of on-line care. BCBSNC looks forward to working with all stakeholders to develop collaboratively a regulatory and legal environment that encourages a model that improves access, care/outcomes, patient experience, and affordability for consumers.

### When Telemedicine Is Covered by Blue Cross and Blue Shield of North Carolina

Evaluation and management and consultation services using Telemedicine or Telehealth technologies may be considered medically necessary under the following conditions:

The patients must be present at the time of consultation.

The medical examination of the patient must be under the control of the consulting practitioner.

All services provided must be medically appropriate and necessary.

The distant site of the services shall be of a sufficient distance from the originating site to provide services to patients who do not have readily available access to such specialty services.

The consultation must take place via an interactive audio and video telecommunications system. Interactive telecommunications systems must be multi-media communication that, at a minimum, include audio and video equipment permitting real-time consultation among the patient, consulting practitioner, and referring practitioner (as appropriate).

A permanent record of online communications relevant to the ongoing medical care of the patient should be maintained as part of the patient’s medical record.

*Source:* Blue Cross and Blue Shield of North Carolina, Telemedicine Corporate Medical Policy, Last Review April 2013, p. 2.
Is FaceTime HIPAA Compliant?

There is confusion about which devices comply with state and federal regulations to protect patient privacy. The only thing that is clear is that technology is changing quickly.

Dr. Sy Saeed at ECU says at this point Skype, Face Time, and other smart phone applications do not support the provision of telepsychiatry services because they do not comply with the federal law known as HIPAA (the Health Insurance Portability and Accountability Act) and other privacy laws. While many of these devices use encryption and other technologies to secure the information, his understanding is that none of them currently meet the thresholds for HIPAA. He says some Medicaid policies specifically exclude Skype, FaceTime, and other similar applications. For example, North Carolina’s Medicaid policy indicates “video cell phone” conversations as not covered. However, Saeed concludes, “I think much of this will change with time.”

On the other hand, Blue Cross Blue Shield of North Carolina says, “The need for expensive equipment may not be justified for this type of program given the nature of videoconferencing capabilities in personal devices.” Apple suggests FaceTime on iPads or iPhones could be HIPAA compliant if WPA2 Enterprise and 128-bit encryption is used over a Wi-Fi connection.

Freddie Zufelt, an attorney practicing healthcare and privacy law in Raleigh, says, “Asking whether a particular device or technology is ‘HIPAA-compliant’ is the wrong starting point for the analysis. The more accurate inquiry is whether the health care provider is using the device or technology in a HIPAA-compliant manner. The HIPAA Security Rule requires physicians and other health care providers to implement reasonable and appropriate safeguards to protect the electronic health information that they create, receive, maintain, or transmit. The Security Rule does not dictate the use of any specific technologies, but instead affords providers flexibility in deciding what measures are ‘reasonable and appropriate’ based on the provider’s infrastructure and the likelihood and severity of potential risks to electronic health information. As a result, physicians that wish to use iPads or other mobile devices in their practices may do so in a HIPAA-compliant manner, provided that they evaluate the potential security risks associated with the device and implement reasonable and appropriate safeguards (such as encryption) to protect against those risks.”
A review by the California Telemedicine and eHealth Center of multiple studies found high patient satisfaction with telepsychiatry. In addition to patient satisfaction, research on telepsychiatry noted an increase in access to care and specialty consultations. Good clinical outcomes also are indicated using telepsychiatry, but more research is needed. While telemedicine has been expensive for providers to set up at the start, it often results in cost savings for patients and their employers, specifically in terms of decreased travel time and time off work, as well as increased worker productivity.

A 2004 study showed that telepsychiatry can be an effective means of treating adults with depression, particularly in small medical practices. The study found that when telepsychiatry is used in a collaborative care approach in rural settings, patients were more likely to take their medications, reducing the severity of depression and increasing their "mental health status, health-related quality of life, and satisfaction."

Barriers To Acceptance and Implementation of Telepsychiatry

While telepsychiatry has shown great promise, policymakers in North Carolina need to be aware of barriers to patients and practitioners that prevent widespread acceptance and implementation of telepsychiatry.

Barriers to Patients

*Patients don’t know about it.* Patients usually learn about new services and procedures through physician referrals. Research has shown that patients are more likely to use telemedicine services if a health care provider recommends it. However,
Should a North Carolina Medical License Be Required To Provide Telepsychiatry Services?

by Mebane Rash

Telepsychiatry connects patients that need help with providers that are located somewhere else. Right now, that somewhere else is typically a psychiatrist at East Carolina University. But it is not hard to imagine that someday the psychiatrist might be located out of state or even in another country. Rep. Jim Fulghum (R-Wake) says, “The non-North Carolina medical professional credentialing problem needs immediate clarification for all forms of telemedicine delivery.”

The very nature of telemedicine and telepsychiatry means the delivery of care is not confined within a state’s borders. For a psychiatrist licensed and located in another state to provide telepsychiatry services here in North Carolina, currently that psychiatrist must also have a license to practice medicine in this state as well. A license is required in both states. This debate occurs at the crossroads of globalization and protectionism.

When we asked a group of stakeholders whether it was time for the N.C. General Assembly to create a legislative study commission to explore whether to ease licensure requirements to allow out-of-state health care providers an exemption to practice telepsychiatry within North Carolina the answer was “no” and really closer to “hell no!”

The comments and concerns included:

“It would weaken the state’s ability to regulate physician practice, behavior, and qualifications.”

“There are no prohibitions that keep them from applying for an N.C. license.”

“This would undermine our goal of connecting N.C. psychiatrists with N.C. patients as a way to develop community capacity and build a service delivery system within the state.”

“Clinical decision-making for a patient requires some real knowledge of the environment, services, and local care systems available to the patient.”

“Clear understanding of the statutes and local rules, especially our 2-exam commitment process, play an important part in clinical decision making.”

“North Carolina will not be able to keep and attract needed psychiatric physicians if we are not working hard to build the workforce in the state.”

“There are too many companies using a business model to sign on as many psychiatrists as they can, help them procure medical licenses in hospitals, there is also an issue related to granting medical staff membership and privileges. The Medicare Conditions of Participation and the Joint Commission Standards for Accreditation both require that each physician be evaluated through a prescribed process before receiving privileges to care for patients and periodically thereafter. Granting privileges solely on the basis of licensure, even if in-state, is specifically forbidden. There must be procedures in place for checking performance history, education, experience, track record, malpractice settlements, etc. In my experience, this process is very important to maintaining quality.”

— BOB MORRISON, RETIRED PRESIDENT/CEO, RANDOLPH HOSPITAL, AND BOARD MEMBER, N.C. CENTER FOR PUBLIC POLICY RESEARCH
The N.C. Telemedicine Initiative is a good first step focused on decompressing the emergency departments because of the waiting list crisis created by lack of bed capacity in the state and in local hospitals. The outcomes are largely emergency department decompression and really don’t look at the bigger context of overall quality of care. In fact, the consultations are largely about release from commitment, not the overall needs of patients. Long-term, that should be the metric by which to evaluate the program.

— Dr. Marvin Swartz, Duke University Medical Center

a dozen states, and then sell telemedicine contracts across the country.”

“Any change to state medical licensing should apply to all physicians, regardless of specialty. Psychiatrists should not be singled out.”

“How will the state medical board oversee quality of care for physicians without the state licensing board doing it?”

In October 2013, the New England Journal of Medicine reported that the ratio of debt at graduation from medical school to starting income is highest for family medicine and then psychiatry followed by emergency medicine, obstetrics and gynecology, general surgery, anesthesiology, radiology, cardiology and orthopedics. Robin Huffman, the executive director of the N.C. Psychiatric Association, says, “The widespread introduction of telemedicine will further distort the career choices made by primary care physicians and may undermine the goal of developing community capacity and building a service delivery system within the state.”

According to an article written by Dr. Sy Saeed of the Brody School of Medicine at ECU, for more than 20 years, experts have suggested the following recommendations to address this problem of needing dual licensure: (1) a national licensing system, (2) assigning the responsibility of care to the referring physician, with the consulting physician’s opinion treated as a recommendation, and/or (3) deeming the patient to have been “electronically transmitted” to the consultant’s state—which conjures up an image of the Star Trek captain’s command, “Beam Me Up, Scotty.”

While the Center understands the concerns expressed about out-of-state providers, the comments assume that there is enough interest from licensed physicians in this state to meet the demand for telemedicine. If that is not true, this question warrants a public and transparent conversation with all stakeholders included at the table.

Sources:


telemedicine is used mostly by specialists currently, so many patients are not aware of the service.19

Patients worry about privacy. The telemedicine literature review notes that “patient uncertainty about privacy protections [is] another frequently highlighted barrier to diffusion of telemedicine.”20

Older patients may be uncomfortable with technology. Some elderly patients tend to be more socially isolated as they age. Therefore, the personal, face-to-face interaction of a traditional office visit has extra meaning. Additionally, elderly patients are typically not as comfortable with “computer-assisted technologies.”21
Barriers for Providers

What is the standard of care? Are there risks of malpractice lawsuits and liability for violating privacy laws? An important concern for providers is having an accepted standard of care for telemedicine services and protection from malpractice liability. The question is whether delivering health care services through tele-technologies should require new standards. In Canada, for example, there is consensus that new standards are not required. In North Carolina, telepsychiatry providers and psychiatrists will be required to carry liability insurance. Minimum coverage for providers will be $1 million to $3 million, and minimum coverage for consultant and referring sites will be $3 million to $5 million. “The liability will reside as it usually does within the medical practice or individual provider.” Additionally, the “nature of IT technologies used in transmitting personal medical records creates heightened concern …” regarding complying with privacy laws.

What are the costs? Incorporating telemedicine into a medical practice can require a significant up-front investment of capital and resources. According to the website of the American Academy of Child and Adolescent Psychiatry, “A wide range of video systems are used for telepsychiatry practice. They vary in cost of the system, the cost of use and in the degree of resolution of the video image. More expensive systems use personal computers, video cameras at both ends of the connection, computer based video monitors and ISDN cable wiring between sites.” The Fiscal Research Division of the N.C. General Assembly estimates $9,000 for consultant desktop units and $19,000 for mobile telemedicine carts. However, as security and privacy concerns

Benefits of Telepsychiatry

1. Travel time is reduced or eliminated.
2. Telehealth equipment costs have plummeted.
3. Patients in distress can be seen more quickly, reducing relapse events.
4. Consultations with off-site specialists can be quickly carried out.
5. Off-site and part-time behavioral health specialists can be members of the clinic team via telehealth.
6. Staff can meet and collaborate more easily, especially when connecting staff located at various sites.

are addressed through advances in technology, the use of iPads, for instance, in telemedicine may lower the costs of this type of service.

Will the psychiatrists get paid? Typically, psychiatrists are reimbursed based upon “patient encounters,” which is defined as the patient and provider being in the same room when care is given. With telepsychiatry services, the patient and provider are not in the same room and may even be hundreds of miles apart. In the best case scenario, getting reimbursement for a telepsychiatry consultation may require some additional paperwork, and it will cover an assessment for a diagnosis, medication management, and psychotherapy. In the worst case, it means that providers may not get paid. The American Psychiatric Association suggests “reimbursement for telepsychiatry should follow customary charges for delivering appropriate current procedural terminology code(s),” and “a structure for reimbursement of collateral charges, such as technician and line time....” Blue Cross Blue Shield of North Carolina opposes mandatory reimbursement policies for telemedicine.

However, restrictions on telemedicine reimbursements are easing. Some states, including North Carolina, have led the way in including telemedicine and telepsychiatry as billable Medicaid services. “Medicare started reimbursing providers for telemedicine in 1999,” and Medicaid now pays for telepsychiatry in 40 states. “We’ve opened it up a lot, so traditional services can be provided by telepsychiatry and billed under Medicaid,” says Dr. Michael Lancaster, former chief of clinical policy for the state Division of Mental Health, Developmental Disabilities and Substance Abuse Services. “That has yet to really move into the private sector. We really would like to see third party payors be more supportive of telepsychiatry.”

“There will never be a virtual substitute for the human touch or voice in promoting healing. Thus, an even greater role exists for physician extenders who know their business.”

— Rep. Jim Fulghum (R-Wake), Physician

Aldona Wos, Secretary of the N.C. Department of Health and Human Services (standing), and Governor Pat McCrory at ECU in August 2013
North Carolina’s New Statewide Telepsychiatry Initiative

Awareness of these barriers to patients and mental health providers will help the state implement a statewide telepsychiatry system worthy of national recognition. In July 2013, the N.C. General Assembly established a statewide telepsychiatry program in North Carolina. The North Carolina Statewide Telepsychiatry Program (NC-STeP) will be administered by East Carolina University’s Center for Telepsychiatry and e-Behavioral Health (CTeB), and it will be substantially similar to the Albemarle Hospital Foundation Telepsychiatry Project. Intended to be up and running statewide by January 1, 2014, all hospitals that are licensed to operate in North Carolina will be allowed to participate. The legislature appropriated $2 million for 2013–14 and $2 million for 2014–15 for the program.

In August 2013, the N.C. Department of Health and Human Services presented a plan to the legislature to implement a statewide telepsychiatry program. Initially, the primary objective of the program is to improve access to telepsychiatry in hospital emergency rooms across the state. Many stakeholders participated in a year-long process to develop the plan. See Table 3 for members of the N.C. Telepsychiatry Program Advisory Group.

There are 108 hospitals with 122 emergency departments in North Carolina. Of these 108 hospitals, 18 are served by the existing Albemarle Hospital Foundation Telepsychiatry Project, 13 are served by Carolinas Health System’s Telepsychiatry Program (based in Charlotte), seven are served by the Novant Telepsychiatry Project (based in Winston-Salem), three are served by the FirstHealth Telepsychiatry Project (based in Pinehurst), and eight have on-site psychiatric coverage. Thus, almost 60 hospitals will be served by North Carolina’s new statewide telepsychiatry program, NC-STeP.

“No matter where you live in North Carolina, you will soon have better access to mental health providers with the expansion of telepsychiatry across our state. Technology will help us connect people with appropriate treatment programs so patients can avoid long waits in the emergency room. North Carolina can be a national leader with this program.”
— Governor Pat McCrory

“The goal should not be about increasing the number of patients seen by telemedicine. Patients should receive the appropriate medical care quickly — be it in person or using a television screen.”
— Robin B. Huffman, Executive Director, N.C. Psychiatric Association
Table 3. North Carolina Telepsychiatry Program Advisory Group

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<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Bryan Arkwright</td>
<td>Director, Center for Telehealth</td>
<td>Mission Health System</td>
</tr>
<tr>
<td>Victor Armstrong, MSW</td>
<td>Behavioral Medicine Program Manager</td>
<td>Alamance Regional Medical Center</td>
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<tr>
<td>Henry Boyd</td>
<td>Health Information Technology Coordinator</td>
<td>N.C. Office of Rural Health and Community Care</td>
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<tr>
<td>Chris Collins</td>
<td>Director</td>
<td>N.C. Office of Rural Health and Community Care</td>
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<tr>
<td>Robin Cummings, MD</td>
<td>Deputy Secretary for Health Services</td>
<td>N.C. Department of Health and Human Services</td>
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<tr>
<td>Sheila Davies</td>
<td>Program Implementation</td>
<td>Brody School of Medicine at East Carolina University</td>
</tr>
<tr>
<td>Phil Donahue</td>
<td>Program Implementation</td>
<td>Brody School of Medicine at East Carolina University</td>
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<tr>
<td>Roy Gilbert</td>
<td>Health Information Technology Manager</td>
<td>N.C. Office of Rural Health and Community Care</td>
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<tr>
<td>Jay Kennedy</td>
<td>Rural Hospital Program Manager</td>
<td>N.C. Office of Rural Health and Community Care</td>
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<tr>
<td>Mike Lancaster, MD</td>
<td>Medical Director, Behavior Health Program</td>
<td>North Carolina Community Care, Inc.</td>
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<tr>
<td>Lynn Lanier</td>
<td>Chief Financial Officer</td>
<td>Vidant Community Hospitals</td>
</tr>
<tr>
<td>Nena Lekwauwa, MD</td>
<td>Medical Director and Chief of Clinical Policy</td>
<td>N.C. Division of Mental Health, Developmental Disabilities, and Substance Abuse Services</td>
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<tr>
<td>Donald Rosenstein, MD</td>
<td>Professor, Departments of Psychiatry and Medicine</td>
<td>University of North Carolina Medical Center</td>
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<tr>
<td>Sy Saeed, MD</td>
<td>Professor and Chairman, Department of Psychiatric Medicine</td>
<td>Brody School of Medicine at East Carolina University</td>
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<tr>
<td>Steve Scoggins</td>
<td>President, CareNet</td>
<td>Wake Forest Baptist Health</td>
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<tr>
<td>Wayne Sparks, MD</td>
<td>Assistant Medical Director, Psychiatric Emergency Services</td>
<td>Carolinas Medical Center</td>
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<tr>
<td>Marvin Swartz, MD</td>
<td>Director, Behavioral Health</td>
<td>Duke University Medical Center</td>
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<tr>
<td>Mike Vicario</td>
<td>Vice President of Regulatory Affairs</td>
<td>N.C. Hospital Association</td>
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<tr>
<td>Leza Wainwright</td>
<td>Chief Financial Officer</td>
<td>East Carolina Behavioral Health</td>
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Source: Roy Gilbert, N.C. Office of Rural Health and Community Care
Man with Many Struggles Gets Help and His Family Back

By Carol Villareal, RHA Behavioral Health Services

RHA Behavioral Health Services is a Critical Access Behavioral Health Agency, or CABHA, that provides mental health and substance abuse services to people in rural and frontier counties.

“Mr. T” is a 63-year-old man diagnosed with generalized anxiety disorder and alcoholism in remission. He has chronic osteoarthritis, back pain, hearing loss, gout, hypertension, and hyperlipidemia. He presented to the Ocracoke Health Clinic for a routine checkup and told the medical staff he was depressed. They referred Mr. T to RHA Behavioral Health Services for psychiatric evaluation and therapy.

He was known as the “scary guy” on the island. No one wanted to go near him. “I was plum crazy,” says Mr. T. “I’d forget to take my medicine and didn’t sleep much. I stayed away from people, had no friends, and was always angry. I worried about everything and got angry when the Ocracoke tourists walked in the middle of the street. I felt guilty that I didn’t get along with my ex-wives, kids, and relatives. I messed things up with too much drinking. I just wanted some help to get better.”

Over a six-month period, Mr. T actively participated in the telepsychiatry service and was involved with medication management. He has been active in counseling, had his medication changed, and has implemented a routine so he is less forgetful and more focused. He is much happier and has rekindled his relationship with his family. He also began positive communications with his ex-wives and, at times, they also support him by sitting in the waiting room at the clinic when he comes in for services.

He is now involved with his family and grandchildren and welcomed with delight in the community and at the health clinic. Although he has experienced some hiccups in his treatment, Mr. T has gotten back on track with the support of his family, the clinic, and the medical and mental health teams. He has risen up to be part of his community, as well as part of his most precious treasure—his family.

Ocracoke Health Clinic
On November 1, 2013, the 18 hospitals served by the Albemarle Hospital Foundation transitioned to the statewide telepsychiatry program, and 53 hospitals were on the waiting list for NC-STeP.38

Under the direction of Dr. Sy Saeed, and with the assistance of Phil Donahue and Sheila Davies who are both now on contract with ECU to facilitate the implementation of the statewide telepsychiatry network,39 ECU’s Center for Telepsychiatry is required to develop and administer an oversight process. The process will include quality management as well as the monitoring and reporting of outcomes for the state’s telepsychiatry program. Currently, the Center for Telepsychiatry is required to report quarterly and annually to the DHHS Office of Rural Health and Community Care on (a) the number of consultant sites and referring sites participating in the program, (b) the number of psychiatric assessments conducted under the program, reported by site or region, (c) the length of stay (LOS) of patients receiving telepsychiatry services in the emergency rooms of hospitals participating in the program, reported by disposition, and (d) the number of involuntary commitments (IVCs) as a result of telepsychiatry assessments, reported by site/region and year, compared to the number of IVCs prior to implementation of this program. Additionally, all clinical providers are required to participate in a peer review process.

Gwen Newman, a patient that uses telepsychiatry in Hyde County, says, “Driving an hour and a half to go to the doctor or to get one of my family members there is exhausting and frustrating. This telemedicine program makes a huge difference for all of us. I know we’re healthier because of it.”43 That’s the promise of telepsychiatry…mental health care comes to you, even if you live in rural North Carolina.

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The Use of Telepsychiatry in Prisons

In 2008, a group of doctors at ECU’s Department of Psychiatric Medicine at the Brody School of Medicine conducted a 50-year literature review of the use and effectiveness of telepsychiatry in correctional settings. They concluded “telepsychiatry seems to be an appropriate option to provide services to patients in correctional facilities in order to improve access to psychiatric services.” There are two important distinctions to note in the provision of telepsychiatry in correctional settings: the lack of privacy for inmates given the security concerns and need to have staff present during the sessions, and the importance of clearly communicating the limits of the physician/patient relationship. The doctors made recommendations for the long-term development of telepsychiatry in correctional settings, including:

Fostering pilot projects in telepsychiatry, particularly utilizing evidence-based approaches;
Considering telephone services where teleconferencing cannot be implemented;
Looking to other states’ telepsychiatry programs to develop guidelines and best practices; and
Identifying the technology infrastructure needs, and then creating and implementing a plan to meet these needs, leveraging federal dollars where available.


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“it is not about technology. It is about relationship.”
— Dr. Sy Saeed, Chairman of the Department of Psychiatric Medicine, Brody School of Medicine, East Carolina University
The Center’s Findings and Recommendations

Based on our research, the N.C. Center for Public Policy Research finds that for many people living in rural North Carolina access to mental health care is the biggest barrier to recovery. Telepsychiatry will increase access to treatment across the state, and it may reduce the amount of time patients have to wait in emergency rooms for treatment, reduce the likelihood that patients will have to return to the emergency room for treatment, reduce the number of involuntary commitments to hospitals for psychiatric care, and reduce readmissions to psychiatric hospitals for those with severe and persistent mental illness. Patient satisfaction with telepsychiatry appears to be high, and the Center did not find any evidence that face-to-face encounters with psychiatrists are more effective.

Based on our findings, the N.C. Center for Public Policy Research recommends that the Governor, the N.C. General Assembly, the Office of Rural Health and Community Care in the N.C. Department of Health and Human Services (DHHS), and the N.C. Telepsychiatry Program Advisory Group consider the following actions to implement the state’s new telepsychiatry program and make it a national model:

1. **The DHHS Office of Rural Health and Community Care and ECU’s Center for Telepsychiatry should conduct a public campaign to raise awareness about telepsychiatry in rural and underserved communities.** This should include patient stories specifically addressing patient concerns regarding their privacy, the confidentiality of their personal health information, and any discomfort older adults may feel about technology.

2. **The DHHS Office of Rural Health and Community Care should provide technical information directly to rural health care providers and health centers describing expected costs, funding sources, legal restrictions, and clear reimbursement rates for telepsychiatry services.**

3. **The N.C. General Assembly should conduct a study of telemedicine, and consider whether private insurers should be required to fully reimburse health care providers for telepsychiatry services.** House Bill 704, which passed the House in 2013 and is pending in the Senate for the 2014 legislative session, would require the Joint Legislative Oversight Committee on Health and Human Services to conduct a study of telemedicine. According to the state’s plan, this bill would be “a first step for possible enactment of legislation to require full payment by third party payors for services provided via telemedicine.” The Legislative Research Commission Study Committee on Health Care Provider Practice Sustainability and Training/Additional Transparency in Health Care is conducting a “comprehensive review of all existing State programs that are designed to improve access to health care provider care using telemedicine, including the name of the program, a description of the program, and details on program performance.” The commission may make an interim report of recommendations to the 2014 legislature and is required to make a final report to the 2015 legislature.

4. **The DHHS Office of Rural Health and Community Care should provide technical and financial assistance to rural health care providers who want to incorporate telepsychiatry into their practices.** The Office should assess the need for a one-time subsidy to hospitals, community health departments, and rural providers to update their telecommunication capabilities. If needed, the legislature should appropriate funds to implement the subsidy.

5. **The N.C. General Assembly should increase funding to the state’s medical schools, nursing programs, schools of social work and psychology programs, as needed, to incorporate telemedicine and telepsychiatry as part of the their curriculum.** The UNC Board of Governors should decide
where to focus the funding, which programs will take a leadership role, and the number of campuses involved.

6. The DHHS Office of Rural Health and Community Care should partner with medical schools in North Carolina to incorporate telepsychiatry into the residency programs at East Carolina University, Duke University, UNC-Chapel Hill, and Wake Forest University and partner with local Area Health Education Center (AHECs) to connect psychiatric residents under appropriate faculty supervision with rural providers via centralized telepsychiatry services.

7. As part of its implementation of North Carolina’s statewide telepsychiatry program, the N.C. Department of Health and Human Services should adopt in its rules the practice guidelines for video-based online mental health services promulgated by the American Telemedicine Association in May 2013. The ATA established these practice guidelines and technical standards for telemedicine, which are based on clinical and empirical evidence, “to help advance the science and to assure the uniform quality of service to patients.” These guidelines serve as both a reference guide for operations and an educational tool to provide appropriate care for patients. Implementing these guidelines for telepsychiatry will improve clinical outcomes and ensure informed and reasonable patient expectations.

8. The N.C. Department of Health and Human Services should develop criteria and outcome measures to evaluate the successes and failures of the state’s telepsychiatry program. Currently, ECU’s Center for Telepsychiatry is required to develop and administer an oversight process, including quality management as well as monitoring and reporting of outcomes for the state’s telepsychiatry program. The Center for Telepsychiatry is already required to report quarterly and annually to the DHHS Office of Rural Health and Community Care on (a) the number of consultant sites and referring sites participating in the program, (b) the number of psychiatric assessments conducted under the program, reported by site or region, (c) the length of stay (LOS) of patients receiving telepsychiatry services in the emergency rooms of hospitals participating in the program, reported by disposition, and (d) the number of involuntary commitments (IVCs) as a result of telepsychiatry assessments, reported by site/region and year, compared to the number of IVCs prior to implementation of this program. Additionally, all clinical providers are required to participate in a peer review process.

ECU’s Center for Telepsychiatry also should be required to track and report these additional outcomes: (a) satisfaction of emergency room staff, the psychiatrist, and the patient, and (b) recidivism data on the number of patients who return to the emergency room within 30 days.

The DHHS Office of Rural Health and Community Care should implement its goals for the telepsychiatry program, including among others increasing the number of patients served with telepsychiatry, reducing the average length of stay (LOS) of telepsychiatric patients in the emergency departments of local hospitals and state psychiatric hospitals, increasing the number of psychiatrists and psychiatric residents trained to use telepsychiatry, and reducing the cost of mental health care. The Office should adopt additional outcome measures that evaluate: (a) whether the patients’ mental health status actually improves; (b) whether involuntary commitments from telepsychiatric patients are reduced; and (c) whether more patients are served after the state’s telepsychiatry initiative is implemented than was true before; and (d) especially whether more are served in rural counties or in medically underserved areas.
Endnotes
1 These counties currently are served by East Carolina Behavioral Health, a managed care organization that oversees the provision of mental health services, serving 19 counties.
2 N.C. Department of Health and Human Services, “Mental Health Crisis Management Report, March 2013-May 2013: Status Report,” Raleigh, NC, October 1, 2013, p. 7. On the Internet at http://www.nccgnet.edu/documents/committees/JLOCHHS/Handouts%20and%20Minutes%20by%20Interim%2012013–14%20Interim%20HHS%20Handouts/October%2029%202013/Reports/LME%20Crisis%20Report-10-01-2013.pdf, accessed October 20, 2013. Wait times reported in this report are more than those reported in the one-month study conducted in November 2010. This report found that during fiscal year 2009–10, 135,536 people were treated in hospital emergency departments across the state for a mental health crisis. More than 20 percent were transferred to a community psychiatric hospital bed. Only 239, or 2.7 percent, were sent to a state psychiatric hospital. The average length of stay in emergency departments for those that were transferred to a community hospital was 14 hours and 7 minutes. The average length of stay for those that were transferred to a state psychiatric hospital was 26 hours and 38 minutes — more than 12 hours longer.
4 There is a pilot program in western North Carolina that uses sitters instead of law enforcement for high acuity patients. The cost in fiscal year 2011 was $503,494 rising to $642,498 in FY 2012 and $671,168 projected for FY 2013. Mission Health Hospital, “North Carolina’s Mental Healthcare Crisis and the Resulting Challenges Facing Mission Hospital,” July 2013, p. 10.
7 On the Internet at http://www.state.sc.us/dmh/telepsychiatry/, accessed on September 19, 2013.
8 Store-and-forward technology involves clinical information (for example, data, image, sound, or video) that is created, stored, then forwarded to another provider for clinical evaluation using email, for example. On the Internet at http://www.telehealth.va.gov/sfa/, accessed September 20, 2013.
13 Smith and Allison, note 8 above, p. 22.
19 Leach, note 17 above, p. 8.
20 Ibid.
21 Ibid.
22 Ibid., p. 9.
24 Leach, note 17 above, p. 9.
25 Ibid.
28 David Brantley et al., Innovation, Investment and Demand in Telehealth, U.S. Department of Commerce Office of Technology Policy, February 2004, p. 73.
29 Sy Saeed, MD, et al., note 15 above.
30 Ibid., p. 30, citing a resource document on telepsychiatry via videoconferencing of the American Psychiatric Association that is not available online anymore.
31 Brantley et al., note 28 above, p. 74.
32 Saeed et al., note 15 above, p. 29.
35 Statewide Telepsychiatry Program Plan, note 4 above, p. 7.
36 Ibid., p. 23. The N.C. Telepsychiatry Work Group led to the creation of the North Carolina Telepsychiatry Program Advisory Group. See Table 3.
37 Ibid., p. 11.
38 Email from Sheila Davies, former telepsychiatry project director of the Albemarle Hospital Foundation, on Oct. 29, 2013.
39 Email from Phil Donahue, former vice president of the Albemarle Hospital Foundation, on Oct. 30, 2013.
40 Statewide Telepsychiatry Program Plan, note 4 above, p. 15.
About the N.C. Center for Public Policy Research

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